



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/812,725 | 03/30/2004 | David E. Stout | H0006224-1070 | 4813 |

7590 06/15/2005

Robert Desmond
Honeywell International, Inc.
Law Dept. AB2
P.O.Box 2245
Morristown, NJ 07962

EXAMINER

ELKASSABGI, HEBA

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2834

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/812,725

Applicant(s)

STOUT ET AL.

Examiner

Heba Elkassabgi

Art Unit

2834

mu

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 10-13 and 15 is/are rejected.
- 7) ☒ Claim(s) 3-9, 14, 16-20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 03/30/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

No foreign or domestic priority is claimed.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 03/30/2004 has been considered by the Examiner. The submission is in compliance with the provisions of 37 CFR 1.97.

Specification

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

Claim #2 is objected to because of the following informalities: The claim limitation of the second rotor surrounding the second rotor is believed to be an error, since an object can not surround itself, for purpose of continuation of examination the Examiner will not consider the limitation until applicant clarifies. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Schrodli (US Patent 6373160).

Schrodli disclose in figure #1 a generator having a rotor frame (see figure #1) having a cylindrical body that defines an interior cavity (see figure #1); and a drive shaft (see figure #1) coupled to the cylindrical body. A first rotor armature (4) coupled to the inner surface of the cylindrical body, the first rotor armature (4) defines a space to receive a stator assembly (1); and a second rotor armature (5) coupled to the outer surface of the cylindrical body and electrically coupled to the first rotor armature (4) (see column 3, lines 66- column 4 line 1). In regards to claim 2, a first stator (1) positioned within the space defined by the first rotor armature (4).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over SchrodI (US Patent 6373160) as applied to claim 2/1 above, and further in view of SchroedI (US Patent 6768237) and Syverson (US Patent 6236134).

SchrodI discloses the base structure of claim #1 and #2, except for the second stator structure.

SchroedI discloses in figure #1, a generator housing (9) having a substantially cylindrical body along a first common axis with the driveshaft (it is inherent that the generator structure has a drive shaft), the first stator (1) fixedly coupled to the cylindrical body (9) along the first common axis, the second stator (4) fixedly coupled to the inner circumference of the cylindrical body (9) of the generator housing as a design choice in order to exchange electric power at a desired voltage. In regards to claim 11, a flange (see figure #1) coupled to the generator housing (9) to enclose the first stator (1), second stator (4), first rotor armature (6) and second rotor armature (5), the flange including a passage to permit the driveshaft to extend outside the generator housing (see figure #1.). In regards to claim 12, a plurality of bearings (8) disposed within the generator housing (9) to facilitate the rotation of the rotor frame (see figure #1)

Syverson discloses in figure #1, the first rotor armature (24) includes one or more windings (28), in order to produce a magnetic current through the shaft.

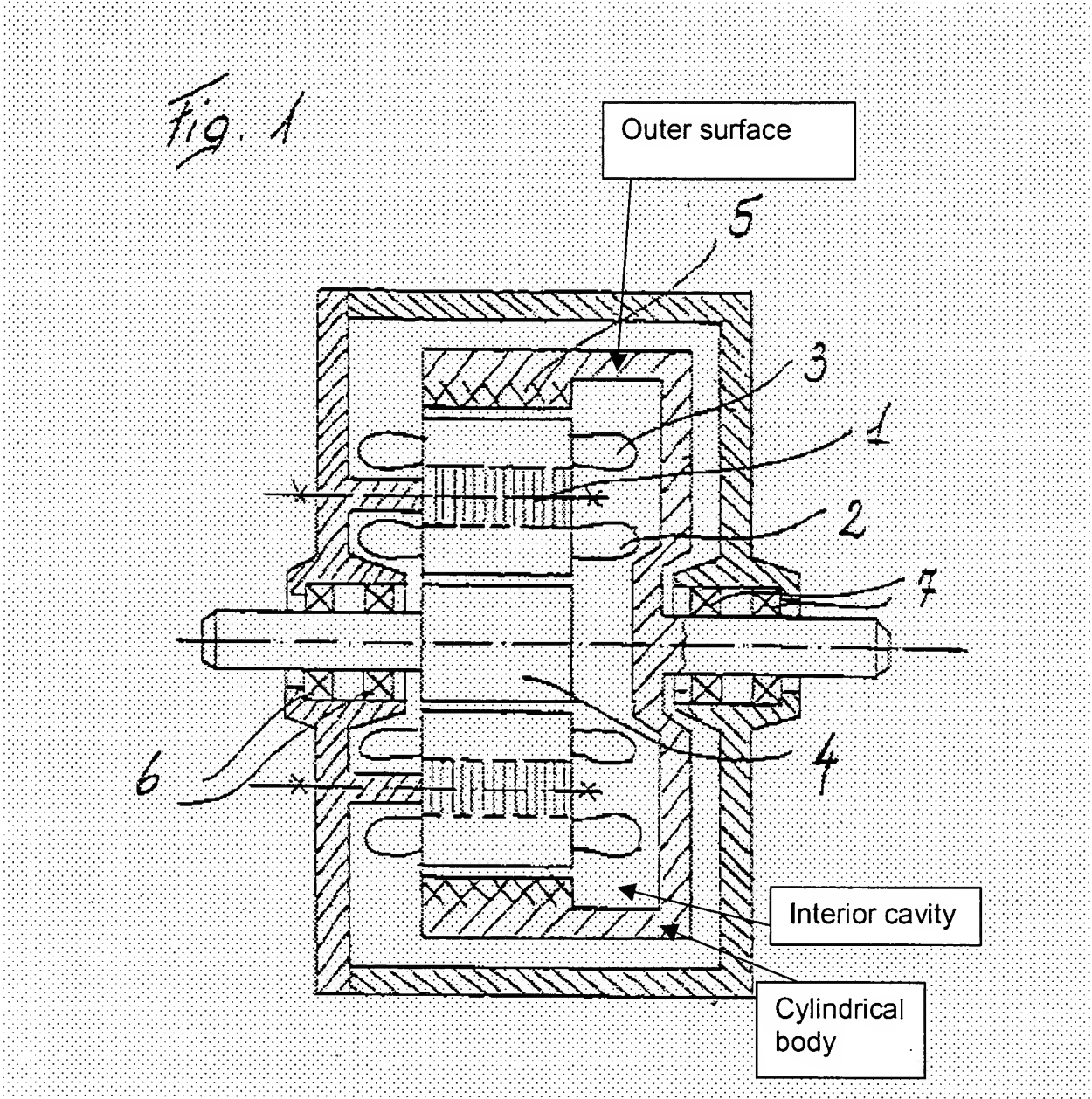
It would have been obvious at the time the invention was made to a person having ordinary skill in the art to combine the base structure of SchrodI with the second stator structure of SchroedI as taught above and the windings of Syverson as taught above.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schrodl (US Patent 6373160) and further in view of Schroedl (US Patent 6768237)

Schroedl discloses in figure #1, a generator having a cylindrical body (see figure #1) that defines an interior cavity (see figure #1) a driveshaft (see figure #1) coupled to the cylindrical body (see figure #1) along the axis of the cylindrical body. A first rotor assembly (4) is coupled to the inner surface of the cylindrical body (see figure #1), the first rotor assembly (4) defines a space to receive a stator (1). A first stator (1) positioned within the space defined by the first rotor assembly (4), but independent from the cylindrical body (see figure #1). A second rotor assembly (5) coupled to the outer surface of the cylindrical body (see figure #1) and electrically coupled to the first rotor assembly (4). Schroedl does not disclose the second stator assembly.

Schroedl discloses in figure #1, a second stator (4) arranged around the second rotor assembly (6) and radially positioned about the axis of the cylindrical body (see figure #1) as a design choice in order to exchange electric power at a desired voltage

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to combine the base structure of Schrodl with the second stator structure of Schroedl as taught above



Allowable Subject Matter

Claims # 3,4-9, 16-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

In regards to claim #3, the prior art does not disclose the base structure a direct current applied to the first stator generates a static magnetic field, which induces an alternating current in the first rotor armature when the driveshaft is rotated.

Dependent claims #4-9 are allowed for being dependent upon claim #3.

In regards to claim #14, the prior art does not disclose the base structure having a second rotor armature with at least one that corresponds the to the winding of the first rotor armature.

In regards to claim #16, the prior art does not disclose the base structure having a direct current applied to the first stator that generates a static magnetic field which includes an alternating current in the first rotor assembly when the driveshaft and cylindrical body are rotated.

Dependent claims #17-18 are allowed for being dependent upon claim #16.

In regards to claim # 19, the prior art does not disclose the base structure having a direct current applied to the first stator to generate a static field which induces an alternating current in the first rotor assembly when the driveshaft is rotated.

The following is an examiner's statement of reasons for allowance: Independent claim #20, does not disclose a direct current that is applied to the first stator that

generates a static magnetic field, which induces an alternating current in the first rotor assembly when the driveshaft and the cylindrical body are rotated.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heba Elkassabgi whose telephone number is 571-272-2023. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Heba Elkassabgi
United States Patent and Trademark Office
Patent Examiner AU 2834


DARREN SCHUBERG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800